



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,707	01/23/2004	Masashi Tokuda	2271/71523	7647

7590 04/10/2008  
Ivan S. Kavrukov, Esq.  
Cooper & Dunham LLP  
1185 Avenue of the Americas  
New York, NY 10036

EXAMINER
----------

ZHU, RICHARD Z

ART UNIT	PAPER NUMBER
----------	--------------

2625

MAIL DATE	DELIVERY MODE
-----------	---------------

04/10/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/763,707	<b>Applicant(s)</b> TOKUDA, MASASHI	
	<b>Examiner</b> RICHARD Z. ZHU	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/08/2008 has been entered.

### *Response to Applicant's Arguments*

2. The applicant appeared to be concerned with the fact that silicon DAA has configurations that are different from conventional DAA and the modification needed to perform such integration would require "an enormous task that one skilled in the art would not have been motivated to undertake". Upon an updated search, the reference *D'Angelo et al* (US 7330544 B2) appears to substantiate applicant's concern in Col 3, Row 35 – Col 4, Row 10 that silicon DAA implementation requires a special configuration that is different from that of conventional DAA of *Blackwell*. As such, the applicant's argument that *AAPA* in view of *Blackwell* do not teach the configuration suitable for silicon DAA is persuasive.

However, upon further consideration of *D'Angelo* (Col 3, Rows 50-56), a new ground of rejection is entered in view of *Rahamim et al.* (US 6351530 B1).

*Averbuch* teaches a way to compensate for over clocking and under clocking in communication signals. A signal as compensated by *Averbuch* would enable the speaker of *AAPA* to output a coherent signal without deficiencies of over clocking and under clocking.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 6-11, 14-16, and 19 are rejected under 35 USC 103 (a) as being unpatentable over the teachings of Applicant Admitted Prior Art (*AAPA*) in view of *Blackwell et al (US 5598401 A)* and *Rahamim et al (US 6351530 B1)*.

**Regarding Claims 1, 7, and 8, *AAPA* discloses:**

an analog interface (**Fig 4, SW1 to NCU section of Fig 5, interface with PSTN**) formed from a silicon data access arrangement (**Fig 5, Page 4, lines 5-14, “silicon data access arrangement”**) operative to interface with an analog telephone line (**Fig 5, Telephone Line 309**), said analog interface including an insulation device (**Fig 5, Insulation Condenser 310**) configured to insulate a remainder of said facsimile use modem apparatus (**Fig 5, Secondary Side comprising Controller Section, Modem DSP Section and System Side Device**) from said analog telephone line;

a digital interface (**Fig 4, ISDN Interface Section 203**) operative to interface with an ISDN or Integrated Services Digital Network line (**Fig. 4, ISDN Line 204**);

a signal converting device (**Fig 4, Codec 206 + Fig 5, Secondary Side 302. The analog interface of Fig 5 passes processed analog signal from PSTN to the codec in Fig 4 for further processing into signal use for ISDN**) configured to convert a modem signal used in facsimile communications via the analog telephone line into a signal used in the ISDN line (**Page 3, lines 11-20**) and convert a second signal from the ISDN line into a converted signal for use in facsimile communications via the analog telephone line (**Page 3, lines 21-28**).

a monitoring device (**Fig. 4, Codec 206 and Addition Amplifier 209**) configured to monitor a progress of the facsimile communications (**Page 3, lines 17-20**); said monitoring device being connected to the silicon data access arrangement (**Page 4, lines 2-4 and Page 4, line 22 – Page 5, line 7**).

a data transmitting device operative to transmit linear data to the speaker (**Fig 4, Speaker 207 and see Page 3, lines 15-20**).

However, *AAPA* does not disclose a monitoring device connected to a silicon data access arrangement and configured to monitor a progress of the facsimile communication via the ISDN line.

*Blackwell* discloses a monitoring device (**Fig 4, Terminal 100 and see Col 4 Row 62 – Col 5, Row 32, a computer that receives modulated information so that the user can use it to make inputs at User Interface 301, Col 7, Rows 11-29**) that is configured to monitor a progress of the facsimile communication via the ISDN line (**Col 6, Row 55 – Col 7, Row 29, the system of *Blackwell* resembles that of the device of *AAPA* in that it allows**

**the communication between ISDN and PSTN lines and there exist a monitoring device in the form of a computer that allows the user to review received information), said monitoring device being connected to a data access arrangement (Fig 4, Analog Interface Circuit 314 and see Col 7, 1-2 that defined the analog interface circuit as a data access arrangement).**

*Blackwell* is in the same field of endeavor of allowing inter-communication between PSTN and ISDN lines as *AAPA*.

It would've been obvious to one ordinarily skilled in the art at the time of the invention, to modify the conventional facsimile apparatus of *AAPA* with the configuration set forth in Fig 4 of *Blackwell* so as to enable the device of *AAPA* to monitor a progress of facsimile communications via the ISDN line even with a data access arrangement present whereas the motivation would've been to provide for "a single integrated data communication device to be configured and also subsequently reconfigured to provide for data communications over a variety of networks including public switched telephone networks, leased line, and digital networks including T1, E1, and ISDN" (*Blackwell*, Abstract).

*Blackwell*, as reasoned by the applicant, does not provide one of ordinary skill in the art with the knowledge to integrate a silicon data access arrangement with said monitoring device.

*Rahamim*, in the same field of endeavor as *AAPA* and *Blackwell*, discloses a configuration (Figs 1-9) for integrating a silicon data access arrangement for

communicatively coupling programmable line side circuitry to system side circuitry (**Col 4, Rows 6-18**) so that analog data from telephone network can be communicated in a digital format (**Col 4, Rows 43-57**).

It would've been obvious to one of ordinary skill in the art, as aided by the instructions of *Rahamim*, to integrate a silicon data access arrangement into the system of the combined teaching in order to communicatively couple an analog facsimile or telephone network with the monitoring device of *Blackwell* so as to downsize the components needed in the system (**CODEC 310 and 316 are no longer needed**) and reduce cost.

**Regarding Claim 7**, the elements claimed herein are similar to Claim 1. Therefore, please refer to rejection of Claim 1 to see relevant rejection. Furthermore, the combined teachings disclose a facsimile apparatus including a facsimile use modem (*APAA*, **Fig 5 and see *Rahamim*, Fig 1**).

**Regarding Claim 8**, the elements claimed herein are similar to Claim 1. Therefore, please refer to rejection of Claim 1 to see relevant rejection. Furthermore, the network connecting the facsimile having the modem, please refer to the ISDN/PTSN network as disclosed by *APAA* and *Blackwell* in the rejection of Claim 1.

**Regarding Claims 2, 10, and 15**, *APAA* teaches a facsimile use modem apparatus wherein said linear data is formed from facsimile sending data and facsimile reception data (**Page 3, lines 17-20**).

**Regarding Claims 3, 11 and 16**, *APAA* teaches a facsimile use modem apparatus further comprising a volume adjusting device configured to multiply each of the facsimile

sending data and facsimile reception data by a prescribed gain when a volume of the speaker is adjusted (**Page 3, lines 17-19. It is well known to all that speaker volume is adjusted by changing the gain of an input amplifier. See also *Rahamim*, Col 6, Rows 20-27 and Col 9, Row 35 – Col 10, Row 4).**

**Regarding Claims 6, 14, and 19, *APAA* discloses a network control unit comprising silicon data access arrangement, speaker, and ISDN interface (Fig 5 a network control unit comprising a silicon data access arrangement and in Fig 4 a Speaker 207 and ISDN Interface Section 203).**

**Regarding Claim 9, *AAPA* discloses wherein said signal converting device includes a DSP section (Fig 5, Modem DSP Section 304), and said DSP section converts a facsimile transmission signal or facsimile reception signal to generate the linear data supplied to the speaker (Page 4, line 22 – Page 5, line 7. The signal from PSTN line of Fig 5 is first processed by Modem DSP Section 304, it is then passed into the SW1 in Fig 4 where an addition amplifier 209 takes the processed signal and sends it to Speaker 207).**

5. Claims 4-5, 12-13, and 17-18 are rejected under 35 USC 103 (a) as being unpatentable over the combined teachings of *APAA*, *Blackwell et al (US 5598401 A)* and *Rahamim et al (US 6351530 B1)*, in view of *Averbuch et al. (US 5502752 A)*.

**Regarding Claims 4, 12, and 17, the combined teachings does not teach a data canceling device.**

***Averbuch* teaches a PSTN/ISDN 100 (Fig. 1, PSTN/ISDN 100) coupled to a mobile network (Fig 1, MSC 105 and see Col 2, Rows 50-53), comprising a data canceling device**



(**Fig 4, Data Buffer 400 and see Col 4, Rows 3-4**) configured to cancel excessive facsimile communications data when a clock of the ISDN line is faster than that of the modem (**Col 4, Rows 8-14 “an entire bit deleted” and see Fig. 8 step 812**).

It would've been obvious to one ordinarily skilled in the art at the time of invention to adapt data buffer 400 to measure clock of ISDN line, as suggested by CLK1 of *Averbuch*, and to measure clock of modem, as suggested by CLK2 of *Averbuch*, in order to conform to the CCITT recommendation for V.110 framing, into the silicon data access arrangement based modem of the combined teachings in order to provide “an apparatus that matches clock rates between independent networks” (*Averbuch*, **Col 2, Rows 9-17**).

**Regarding Claims 5, 13, and 18**, *Averbuch* discloses that the apparatus further comprising a noise suppressing device (**Fig 4, Data Buffer 400 and see Col 4, Rows 3-4**) operative to suppress noises output by repeatedly using a previous data when the clock of the ISDN line is slower than that of the modem (**Col 4, Rows 14-24 “an entire bit is added...” and see Fig. 8 step 812**).

The combined teachings as modified by *Averbuch* would be enabled to output a consistent signal without excessive or insufficient amount of signal into the speaker as taught by *AAPA* so that a user can aurally monitor a sufficiently consistent audio signal.

***Conclusion***

6. US 7139104 B2 has the same assignee as the present application and it qualifies as prior art under 35 USC 102(a) and (e) only. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 7139104 B2 discloses a silicon data access arrangement in a facsimile machine. US 7330544 B2 discloses a method for resolving any complications arises from integrating a silicon data access arrangement into an apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Richard Z. Zhu whose telephone number is 571-270-1587 or examiner's supervisor King Y. Poon whose telephone number is 571-272-7440. Examiner Richard Zhu can normally be reached on Monday through Thursday, 6:30 - 5:00.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RZ<sup>2</sup>  
03/25/2008

Richard Z. Zhu  
Assistant Examiner  
Art Unit 2625

*/King Y. Poon/*

*Supervisory Patent Examiner, Art Unit 2625*